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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

WENDELL, ANDREW

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/814,188	Applicant(s) NISHIJIMA ET AL.	
	Examiner ANDREW WENDELL	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-25 and 37-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-25 and 37-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-7, 18-19, 24-25, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US Pat Pub# 2006/0063570) in view of Ikeda et al. (US Pat# 6,957,083) and further in view of Gauld et al. (US Pat Pub# 2004/0198435).

Regarding claim 1, Nishimura's portable apparatus teaches a mobile terminal 100 (Fig. 1), comprising a control unit 99 (Fig. 1; Section 0033; obvious there is a control unit to have communication); a display unit 54 and 4 (Fig. 1); an upper housing 51 (Fig. 1); a lower housing 2 (Fig. 1); and a 2-axis hinge unit 3 and 11 (Fig. 3) for coupling the housings 2 and 51 (Fig. 1) for folding and swinging movement of the upper housing relative to the lower housing about intersecting axes, one of which is arranged in the lower housing 2 (Fig. 1) and the other of which is arranged in the upper housing 51 (Fig. 1); wherein a top face of the one of the axes is exposed 3 (Fig. 2) outside the terminal 1, 4, and 6 (Fig. 2), and an information input device 4 and 6 (Fig. 2) is mounted in the top face of one of the axes. Nishimura fails to teach a pointing device and a through cutting in an edge portion of the upper housing.

Ikeda teaches a display unit 102 (Fig. 1a); an upper housing 100 (Fig. 1a); a lower housing 200 (Fig. 1a); and a 2-axis hinge unit 300 (Fig. 1a); wherein a top face of

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the one of the axes is exposed 400 (Fig. 1a, part of 400 is used as axes which is exposed) outside the terminal 1 (Fig. 1a) for viewing due to arranging the one of the axes in the through cutting of the upper housing in all positions of the upper housing 100 (Fig. 1a, part 400 is placed in the cutting of the upper housing), and an information input device 400 (Fig. 1a) is mounted in the top face of one of the axes.

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a through cutting in an edge portion of the upper housing as taught by Ikeda into Nishimura's portable apparatus in order to increase usability when the housings are folded or open (Col. 1 lines 43-56).

Nishimura and Ikeda fail to teach a pointing device.

Gauld's camera integration on a mobile device teaches a pointing device 17 (Fig. 1) and a control unit 104 (Fig. 4).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a pointing device as taught by Gauld into a through cutting in an edge portion of the upper housing as taught by Ikeda into Nishimura's portable apparatus in order to provide an intuitive user interface (Sections 0013-0014).

Regarding claim 2, Gauld further teaches wherein the control unit 104 (Fig. 4) controls the terminal according to an operation of the information input device 16 (Fig. 2).

Regarding claim 3, Gauld further teaches wherein the control unit 104 (Fig. 4) assigns a predetermined function to the information input device (Section 0015).

Regarding claim 5, Gauld further teaches wherein the control unit 104 (Fig. 4) assigns another operating function to the pointing device 17 (Fig. 1 and Sections 0024 and 0044).

Regarding claim 6, Gauld further teaches wherein the information input device 17 (Fig. 1) further comprises a terminal operating function (Section 0024).

Regarding claim 7, Gauld further teaches wherein the terminal operating function is performed by a press (Section 0024). Note, the user has to perform the function, so a press or some pressure has to be performed for a user to have function.

Regarding claim 18, Gauld further teaches wherein the control unit detects an operation of a predetermined operation key to control an operation of the information input device (Section 0015).

Regarding claim 19, Gauld further teaches wherein the control unit controls an operation of the information input device while a predetermined operation key is operated (Section 0015).

Regarding claim 24, Nishimura further teaches wherein the terminal is a mobile telephone 100 (Fig. 1).

Regarding claim 25, Nishimura further teaches wherein the two axes of the 2-axis hinge unit are a folding axis and a horizontal rotation axis (Fig. 3), the upper housing 51 (Fig. 3), and the one of the axes is the horizontal rotation axis (Figs. 2, 5, and 7).

Regarding claim 39, apparatus claim 39 is rejected for the same reason as apparatus claim 1 since the recited elements would perform the claimed steps.

3. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US Pat Pub# 2006/0063570) in view of Ikeda et al. (US Pat# 6,957,083) and further in view of Gauld et al. (US Pat Pub# 2004/0198435) and further in view of Schmitt et al. (US Pat# 6,088,585).

Regarding claim 8, Nishimura in view of Ikeda and further in view of Gauld teaches the limitations in claim 1. Nishimura, Ikeda, and Gauld fail to teach a fingerprint sensor.

Schmitt's portable telecommunication device including a fingerprint sensor teaches a fingerprint sensor 30 (Fig. 14).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a fingerprint sensor as taught by Schmitt into a pointing device as taught by Gauld into a through cutting in an edge portion of the upper housing as taught by Ikeda into Nishimura's portable apparatus in order to increase security and reliability (Col. 3 lines 3-11).

Regarding claim 9, the combination including Schmitt teaches wherein the control unit 207 (Fig. 15) can operate the terminal 190 (Fig. 15) when the fingerprint sensor 30 (Fig. 15) detects a predetermined input.

4. Claims 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US Pat Pub# 2006/0063570) in view of Ikeda et al. (US Pat# 6,957,083) and

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further in view of Gauld et al. (US Pat Pub# 2004/0198435) and further in view of Kim (US Pat# 6,621,066).

Regarding claim 10, Nishimura in view of Ikeda and further in view of Gauld teaches the limitations in claim 1. Nishimura, Ikeda, and Gauld fail to teach position detection means.

Kim's optimizing opening and closing control of a sub-body in automatic and manual folder type mobile communication terminals teaches position detection means 236, 238, 300 and 302 (Fig. 4) for detecting relative positions between the upper housing and the lower housing

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a sensor detection means as taught by Kim into a pointing device as taught by Gauld into a through cutting in an edge portion of the upper housing as taught by Ikeda into Nishimura's portable apparatus in order to have a more efficient and precise control for opening or closing the sub-body folder upon using of the terminal (Col. 1 lines 51-61).

Regarding claim 11, Kim further teaches wherein the control unit 200 (Fig. 3) controls the terminal based on an output of the position detection means 236 and 238 (Fig. 3).

Regarding claim 12, Gauld further teaches wherein the control unit 104 (Fig. 4) controls an operation of the information input device 16 (Fig. 4).

Regarding claim 13, Kim further teaches wherein the position detection means comprise a magnet 300 and 302 (Fig. 4) and a magnetic sensor 236 and 238 (Fig. 4).

Regarding claim 14, Kim further teaches wherein the magnet 300 and 302 (Fig. 4) and the magnetic sensor 236 and 238 (Fig. 4) are arranged in separate housings (Fig. 4).

Regarding claim 15, Kim further teaches wherein the magnetic sensor is a Hall element (Fig. 4).

Regarding claim 16, Kim further teaches wherein the position detection means detect a turning direction of the housings (Col. 2 line 1-Col. 3 line 18).

Regarding claim 17, Ikeda further teaches wherein the control unit controls the display unit based on the turning direction of the housings (Col. 1 line 57-Col. 2 line 44 and Col. 3 line 41-Col. 5 line 60).

5. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US Pat Pub# 2006/0063570) in view of Ikeda et al. (US Pat# 6,957,083) and further in view of Gauld et al. (US Pat Pub# 2004/0198435) and further in view of Wada et al. (US Pat Pub# 2003/0174240).

Regarding claim 20, Nishimura in view of Ikeda and further in view of Gauld teaches the limitations in claim 1. Nishimura, Ikeda, and Gauld fail to teach a lock unit.

Wada's mobile telephone teaches a lock unit for locking the 2-axis hinge unit (Section 0055).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a lock unit as taught by Wada into a pointing device as taught by Gauld into a through cutting in an

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edge portion of the upper housing as taught by Ikeda into Nishimura's portable apparatus in order to increase security (Section 0017 and 0056).

Regarding claim 21, Wada further teaches wherein the lock unit is controlled by an input from the information input device (Section 0055).

Regarding claim 22, Wada further teaches wherein the information input device is a personal authentication sensor (Section 0055); and the lock unit is released when the sensor detects a predetermined input (Section 0055).

6. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US Pat Pub# 2006/0063570) in view of Ikeda et al. (US Pat# 6,957,083) and further in view of Gauld et al. (US Pat Pub# 2004/0198435) and further in view of Wada et al. (US Pat Pub# 2003/0174240) and further in view of Schmitt et al. (US Pat# 6,088,585).

Regarding claim 23, Nishimura in view of Ikeda and further in view of Gauld and further in view of Wada's mobile telephone teaches the limitations in claims 1 and 20-22. Nishimura, Gauld, Ikeda, and Wada fail to teach a fingerprint sensor.

Schmitt's portable telecommunication device including a fingerprint sensor teaches a fingerprint sensor 30 (Fig. 14).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a lock unit as taught by Wada into a fingerprint sensor as taught by Schmitt into a pointing device as taught by Gauld into a through cutting in an edge portion of the upper housing as taught

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by Ikeda into Nishimura's portable apparatus in order to increase security and reliability (Col. 3 lines 3-11).

7. Claims 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (US Pat Pub# 2006/0063570) in view of Ikeda et al. (US Pat# 6,957,083).

Regarding claim 37, Nishimura's portable apparatus teaches a mobile terminal 100 (Fig. 1), comprising a control unit 99 (Fig. 1; Section 0033; obvious there is a control unit to have communication); a display unit 54 and 4 (Fig. 1); an upper housing 51 (Fig. 1); a lower housing 2 (Fig. 1); and a 2-axis hinge unit 3 and 11 (Fig. 3) coupling the housings 2 and 51 (Fig. 1) and having an open/close rotation axis and a horizontal rotation axis which is in the upper housing in all positions of the upper housing (Figs. 1-2, and 5); and an information input device being mounted in a top face of the horizontal rotation axis 4 and 6 (Figs. 1 and 2). Nishimura fails to teach a pointing device and a through cutting in an edge portion of the upper housing.

Ikeda teaches a display unit 102 (Fig. 1a); an upper housing including a through cutting in an edge portion 100 (Fig. 1a, part 400 is placed in the cutting of the upper housing); a lower housing 200 (Fig. 1a); and a 2-axis hinge unit 300 (Fig. 1a) coupling the housing 100 and 200 (Fig. 1a) and having an open/close rotation axis and a horizontal rotation axis which is in the through cutting of the upper housing in all positions of the upper housing (Figs. 1a and b); and an information input device 400 (Fig. 1a) being mounted in a top face of the horizontal rotation axis.

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art at the time the invention was made to incorporate a through

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cutting in an edge portion of the upper housing as taught by Ikeda into Nishimura's portable apparatus in order to increase usability when the housings are folded or open (Col. 1 lines 43-56).

Regarding claim 38, the combination including Ikeda teaches wherein a lower portion of the horizontal rotation axis 300 (Fig. 1a) is in the lower housing 200 (Fig. 1a) and an upper portion is in the through cutting of the upper housing 100 (Fig. 1a).

Response to Arguments

8. Applicant's arguments with respect to claims 1-3, 5-25, and 37-39 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW WENDELL whose telephone number is (571)272-0557. The examiner can normally be reached on 8:00-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nay A. Maung/
Supervisory Patent Examiner, Art Unit 2618

/Andrew Wendell/
Examiner, Art Unit 2618

8/13/2009